### **FALL 1997**

### **REVENUE SOURCES BOOK**

### FORECAST AND HISTORICAL DATA



STATE OF ALASKA
DEPARTMENT OF REVENUE
OIL AND GAS AUDIT DIVISION

Tony Knowles, Governor
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October 31, 1997

The Honorable Tony Knowles Governor of Alaska P.O. Box 110001 Juneau, Alaska 99811-0001

Dear Governor Knowles:

Though it's not exclusively glad tidings, our Fall 1997 Revenue Sources Book offers much to enjoy. I am happy to report that in FY 1997 we collected nearly \$2.5 billion in net disposable general fund unrestricted revenues. This was the best year for state revenues since 1991. Higher revenues were the direct result of Alaska North Slope oil averaging \$20.85/bbl.

However, we project lower revenues in FY 1998 and FY 1999 because of declining North Slope production and oil prices that are expected to average just over \$18/bbl. We expect net disposable general fund unrestricted revenues of \$2.124 billion in FY 1998 and \$1.9876 billion in FY 1999.

ANS production declined to an average of 1.405 million barrels/day in FY 1997 and we expect it to drop to 1.325 million barrels/day in FY 1998, then to 1.310 million barrels/day in FY 1999.

Returning to the good news, we forecast an increase in production in FY 2000 to 1.355 million barrels/day as the result of new fields currently under development. We expect production to remain at about that level through FY 2001 before beginning to decline again.

Even with the short-term oil-patch renaissance, we still expect state oil revenues to decline over the long term since the new fields qualify as economically marginal and therefore will not pay the same higher taxes as our larger yet diminishing fields. We are also faced with somewhat higher transportation costs to market our oil production as the existing ANS tanker fleet is refitted or replaced with double-hull tankers.

The Revenue Sources Book projects state revenues from FY 1998 through FY 2020.

Though oil revenues will decline over time, Alaska's total revenue picture, which we have developed with the Office of Management and Budget, continues to look very good. Our Revenue Sources Book projects the Constitutional Budget Reserve Fund will hold \$3.6 billion by year-end FY 1999 and the Permanent Fund will reach a market value of \$23.5 billion.

Wilson I Condor

Commissioner

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### **EXECUTIVE SUMMARY**

### FALL 1997 REFERENCE CASE

### Short-Term Outlook (FY 1997-1999)

Thanks to prices that averaged \$20.85/barrel for Alaska North Slope oil, FY 1997 General Fund unrestricted revenue amounted to \$2,498 million. FY 1997 was the best year for state revenue since FY 1991. So far in FY 1998, ANS oil prices have averaged just over \$18/barrel and that is about what we expect for the rest of this fiscal year and for FY 1999 as well. We expect oil production to decline slightly through FY 1999 but pick up again in FY 2000. Given the uncertainties with respect to the oil market, and given the state's reliance on oil production revenue, we recommend that the reader examine the petroleum revenue sensitivity matrices on Page 32 to understand the effects that different oil prices and production have on state revenue.

Highlights from our fall 1997 forecast are:

- \* Oil prices are expected to continue to fluctuate around the \$18/barrel level as continued strong demand absorbs increasing world production both outside and within OPEC.
- \* General Fund unrestricted revenue will exceed \$2 billion through FY 1999.

Net Disposable

- \* Oil production revenue will continue to dominate the General Fund unrestricted revenue picture.
- \* ANS production will increase in FY 2000 as the result of the combined production of a number of new oil fields including Alpine, Northstar, Tarn, Badami and West Sak.
- \* Non-petroleum revenue will decrease from \$477 million in FY 1998 to \$446.8 million in FY 1999. This decrease is mostly the result of a one-time payment of \$25 million that the state will receive in FY 1998 from an agreement with TAPS owners. Non-petroleum revenue will level off in FY 1999.

### Table 1.

### SHORT-TERM REFERENCE CASE Fall 1997 Forecast Projections

		Not Disposable				
		General Fund	General Fund	ANS Market	ANS	
F	Υ	Unrestricted Revenue	Unrestricted Revenue	Price	Production	
-		(\$ Million)	(\$ Million)	(\$/Barrel)	(Million Barrels/ Day)	
Prelim ACTUAL	4007	2498.1	2404.0	20.05	4.405	
Prelim ACTUAL	1997		2494.9 2080.9	20.85 18.11	1.405 1.325	
	1999		2000.4	18.22	1.310	

### Long-Term Outlook (FY 2000-2020)

Our long-term outlook for revenue assumes no changes are made in the current fiscal system. As a result, oil revenue will continue to dominate Alaska's General Fund revenue picture. Our reference case for long-run oil prices is a composite of two alternative scenarios. One scenario is that demand will tend to outpace supply with the result that oil prices grow at a rate close to that of dollar inflation. The other scenario is that oildemand growth over the long haul will moderate as energy consumption technologies improve and higher-emissions targeted taxes make oil more expensive to consumers. Alaska oil production is projected to increase in FY 2000-2001 before starting to decline in FY 2002. This forecast does not include the revenue effect of a major North Slope gas sale or the opening of the Arctic National Wildlife Refuge (ANWR) or the National Petroleum Reserve-Alaska (NPR-A).

\* New oil field development will result in a significant increase in oil production in FY 2000-2001. Oil production is projected to decline over the long term at roughly 6 percent per year.

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- \* Oil prices drift up slowly as increasing oil consumption puts pressure on available global supplies.
- \* Increasing transportation costs due to the new hull requirements for tankers, and impact of current production tax rate will dampen the revenue effect of the higher production in FY 2000 and beyond.
- \* Non-petroleum General Fund revenue grows at about 1 percent per year.

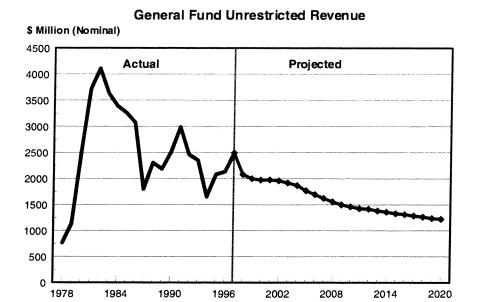
Table 2.

### LONG-TERM REFERENCE CASE Fall 1997 Forecast Projections

	Net Disposable			
	General Fund	General Fund	ANS Market	ANS
FY	Unrestricted Revenue	Unrestricted Revenue	Price	Production
	(\$ Million)	(\$ Million)	(\$/Barrel)	(Million Barrels/ Day)
2000	1962.6	1976.1	18.34	1.355
2001	1 1965.7	1979.0	18.93	1.354
2002	1946.4	1959.7	19.50	1.326
2003	1906.5	1919.8	20.12	1.264
2004	1857.8	1871.1	20.75	1.198
2005	5 1755.7	1769.0	21.39	1.129
2010	1449.1	1462.4	25.08	0.772
2015	1317.6	1330.9	29.72	0.553
2020	1208.2	1221.5	35.55	0.394

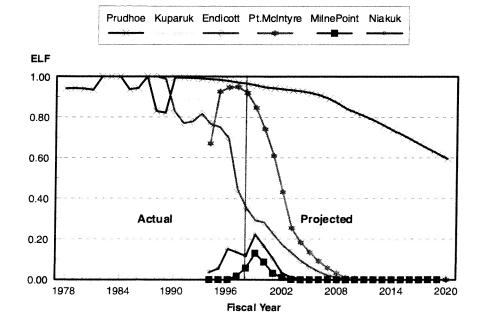
Figure 1. FALL1997 REFERENCE CASE GENERAL FUND UNRESTRICTED REVENUE Actual (FY 1978-1997) and Projected (FY 1998-2020)

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Fiscal Year

Figure 2. ECONOMIC LIMIT FACTOR (ELF)
FOR FIELDS WITH CURRENT ELF GREATER THAN ZERO
Actual (FY 1978-1997) and Projected (FY 1998-2020)



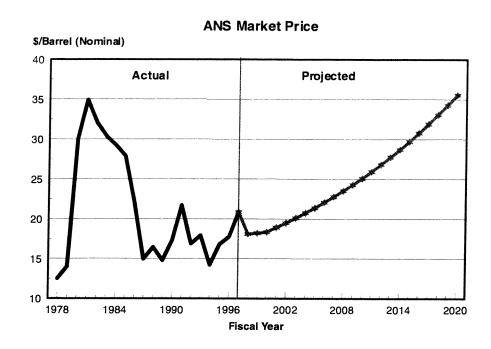
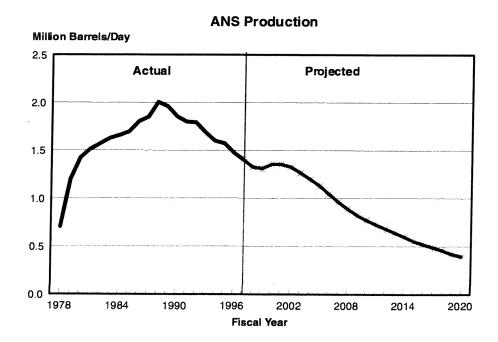


Figure 4. FALL 1997 REFERENCE CASE ANS PRODUCTION Actual (FY 1978-1997) and Projected (FY 1998-2020)



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### REVENUE FORECAST

### SHORT-TERM OUTLOOK, FY 1997-1999

The pages that follow summarize the Alaska revenue forecast by source.

The Department of Revenue has historically forecast an amount of General Fund unrestricted revenue that includes all the unrestricted revenue items in the state accounting system (AKSAS) together with certain program receipts that are accounted for as restricted revenue in AKSAS. We now include all program receipts in our projections (except for statutory designated program receipts, Alaska Public Utilities Commission, and test fisheries program receipts) of the General Fund unrestricted revenue because these revenues are not restricted to any particular use.

Both the Governor's Office of Management and Budget and the Alaska State Legislature make a series of adjustments to the Department of Revenue's forecast of General Fund unrestricted revenue to derive a forecast of net disposable General Fund unrestricted revenue. Reductions include: (1) earmarking revenue for specific programs like the Marine Highway System; (2) pass-through revenue for qualified regional aquaculture associations; and (3) revenue shared with qualified local governments and organizations (e.g. fisheries taxes). Additions include: (1) transfer payments from state-owned entities like the Alaska Housing Finance Corporation and the Alaska Industrial Development and Export Authority; and (2) settlements of legal disputes that are not subject to deposit into the Constitutional Budget Reserve Fund (CBRF).

Table 4 reflects the derivation of net disposable General Fund unrestricted revenue. The total revenue reflected in this table is the amount generally used for budget and budget planning purposes. Net disposable General Fund unrestricted revenue does not include settlements from disputes over mineral taxes and royalties, or funds in the CBRF.

Table 5 reflects revenue sources that are annually appropriated under the Executive Budget Act. Much of the revenue is restricted to specific use or may be appropriated only in certain circumstances (e.g. the CBRF).

Table 6 summarizes forecast revenue and fund balances for the Constitutional Budget Reserve Fund and the Alaska Permanent Fund.

### GENERAL FUND UNRESTRICTED REVENUE

(\$ Million)

This table presents the General Fund unrestricted revenue forecast that conforms to the account structure of the State accounting system (AKSAS). All General Fund program receipts (reflected in AKSAS) are included.

	Prelim ACTUAL			
	FY 1997	FY 1998	FY 1999	FY 2000
TAXES				
Property Tax - Oil and Gas (1)	53.6	51.0	49.3	47.5
Sales/Use Tax				
Alcoholic Beverage	11.6	11.9	12.0	12.1
Tobacco Products	13.7	14.7	15.2	15.2
Insurance Premium	28.4	28.6	28.9	29.2
Electric and Telephone Cooperative (2)	2.7	2.7	2.7	2.8
Motor Fuel Tax-Aviation (3)	8.1	5.3	5.4	5.4
Motor Fuel Tax-Highway	19.9	24.9	25.1	25.4
Motor Fuel Tax-Marine	7.3	7.3	7.4	7. <b>4</b>
Total	91.7	95.4	96.7	97.5
Income Tax				
Corporation General	48.4	51.6	52.1	52.6
Corporation Petroleum	269.4	216.0	216.0	216.0
Total	317.8	267.6	268.1	268.6
Severance Tax				200.0
Oil and Gas Production	907.0	697.0	657.0	625.0
Oil and Gas Conservation	1.7	1.7	1.6	1.7
Oil and Gas Hazardous Release	12.9	12.4	12.2	12.6
Total	921.6	711.0	670.9	639.4
Other Natural Resource Tax			0.0.0	
Salmon and Seafood Marketing (4)	6.6	5.6	3.0	3.0
Salmon Enhancement (5)	4.2	4.0	4.1	4.1
Fisheries Business (6)	31.0	24.6	25.6	25.6
Fishery Resource Landing (7)	8.3	7.0	7.0	7.0
Mining	0.4	0.8	1.0	<u>1.5</u>
Total	50.5	42.0	40.7	41.2
Other Tax		ALIE THE POST		2 (2.0 m)
Estate	1.7	1.7	1.7	1.7
Charitable Gaming	<u>1.9</u>	<u>1.9</u>	1.9	1.9
Total	3.6	3.6	3.6	3.7
TOTAL TAXES	1438.8	1170.6	1129.3	1097.9

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<sup>(1)</sup> Amounts represent the state's share of the total oil and gas property taxes collected. Estimated total property taxes and the municipalities' share are as follows (\$ Million): FY 1997: \$293.3 and \$239.7; FY 1998: \$284 and \$233; FY 1999: \$283.2 and \$233.9, and FY 2000: \$279.6 and \$232.1. Note that these tax revenues are not reflected as shared taxes in Table 4 because the State never receives the municipal portion of this tax.

<sup>(2) 100</sup> percent of the tax is subject to sharing with qualified municipalities (AS 10.25.570). See Table 4.

<sup>(3) 60</sup> percent of taxes attributable to aviation fuel sales at municipally owned or operated airports are subject to sharing with qualified municipalities (AS 43.40.010). See Table 4.

<sup>(4)</sup> Provides annual funding for the Alaska Seafood Marketing Institute (AS 16.51.120 and AS 43.76.120). The salmon marketing tax sunsets on June 30, 1998. Does not include \$1 million transfered from the Fishery Resource Landing Tax to the Alaska Seafood Marketing Institute in FY 1997.

<sup>(5)</sup> Provides annual funding for qualified regional aquaculture associations (AS 43.76.025). See Table 4.

<sup>(6) 50</sup> percent is subject to sharing with qualified municipalities (AS 43.75.130). See Table 4.

<sup>(7) 50</sup> percent is subject to sharing with qualified municipalities (AS 43.77.060). See Table 4.

**Prelim ACTUAL** 

	FY 1997	FY 1998	FY 1999	FY 2000
LICENSES AND PERMITS				-
Motor Vehicle	35.6	33.0	29.4	29.7
Other (8)	33.4	31.0	31.0	31.3
TOTAL LICENSES AND PERMITS	69.0	64.0	60.4	61.0
INTERGOVERNMENTAL RECEIPTS	2.0	1.5	1.5	1.5
CHARGES FOR SERVICES				
Marine Highways (9)	38.6	37.5	41.0	41.6
Airports/Other (10)	<u>39.5</u>	<u>31.5</u>	<u>31.8</u>	<u>32.1</u>
TOTAL CHARGES FOR SERVICES	78.1	69.0	72.8	73.7
FINES AND FORFEITURES	8.2	10.6	9.1	9.2
RENTS AND ROYALTIES				
Mineral Bonuses and Rents (11)(12)	6.4	3.3	3.0	3.0
Oil and Gas Royalties (11)	759.2	622.6	614.4	619.6
Timber Sales	1.9	1.8	1.8	1.7
Coal Rent and Royalties (11)	1.0	1.2	1.2	2.2
Other Resource Revenue	<u>8.6</u>	8.0	<u>8.1</u>	8.2
TOTAL RENTS AND ROYALTIES	777.1	636.9	628.5	634.7
INVESTMENT EARNINGS (13)	77.1	65.6	62.6	61.9
OTHER MISCELLANEOUS (14)	44.6	62.7	36.2	36.2
TOTAL GENERAL FUND UNRESTRICTED REVENUE (15)	2494.9	2080.9	2000.4	1976.1

- (8) Includes amounts from coin-operated devices (AS 43.35.050) and liquor licenses (AS 04.11.610) shared to qualified municipalities. See Table 4.
- (9) The gross revenue of the state ferry system is deposited in the Alaska Marine Highway Fund (AS 19.65.06) and may then be appropriated for system operating and capital expenditures.
- (10) Includes miscellaneous receipts for services, park fees and land-disposal fees. Projections do not include health insurance premiums, statutory designated program receipts, Alaska Public Utilities Commission or test fisheries receipts.
- (11) Net of Permanent Fund and Public School Fund contributions.
- (12) The first North Slope areawide lease sale is scheduled for June 1998. Other future sales include a re-offer of Cook Inlet leases, Sale 85A-W, in February 1998 and a Beaufort Sea Sale, Sale 86, in November 1997. 50 percent of the bonuses are deposited into the Permanent Fund.
- (13) Earnings include investment income from the General Fund and funds within the General Fund group. Additionally, includes interest income from state loans and royalty and severance taxes.
- (14) Includes \$25 million and \$1.5 million from one-time payments per agreements between TAPS owners and the state. The \$25 million payment will be received by the state on February 4, 1998, per the Alaska Department of Law. Projections do not include statutory designated program receipts, Alaska Public Utilities Commission or test fisheries program receipts.
- (15) This includes all revenue that is collected by the state and is not restricted in its use. Federal and other grants are restricted revenue and are excluded from this table.

### Table 4. NET DISPOSABLE GENERAL FUND UNRESTRICTED REVENUE (\$ Million)

Each year the Governor's Office of Management and Budget and the Legislature must make adjustments to our forecast of General Fund unrestricted revenue to derive net disposable General Fund unrestricted revenue. First, the amount of the tax and license revenues collected by the state that are passed through to municipalities must be deducted. Second, certain pass through and earmarked General Fund revenue items that the Legislature treats as restricted must also be deducted. Third, certain miscellaneous other revenue must be added.

	Prelim ACTUA	L		
	FY 1997	FY 1998	FY 1999	FY 2000
UNRESTRICTED TO RESTRICTED		****		
Taxes Shared With Municipal Government (1)				
Electric and Telephone Cooperative	(2.6)	(2.7)	(2.7)	(2.8)
Fuel Tax-Aviation	(0.1)	(0.2)	(0.2)	(0.2)
Fisheries Business	(15.4)	(12.3)	(12.8)	(12.8)
Fishery Resource Landing (2)	(4.1)	(3.5)	(3.5)	(3.5)
Liquor Licenses and Coin-Operated Devices	(0.9)	(0.9)	(0.9)	(0.9)
Total	(23.1)	(19.6)	(20.1)	(20.2)
Pass-Throughs (3)				
Salmon Enhancement	(4.2)	(4.0)	(4.1)	(4.1)
Earmarked (4)	`		ISPC-MALES II A	
Marine Highways	(38.6)	(37.5)	(41.0)	(41.6)
TOTAL UNRESTRICTED TO RESTRICTED	(65.9)	(61.1)	(65.2)	(65.9)
RESTRICTED TO UNRESTRICTED				
Unclaimed Property Payments	1.3	1.5	1.5	1.5
Deposit Excess Loan Funds	2.8	0.9	0.9	0.9
Trans-Alaska Pipeline Liability Fund (5)	0.0	15.8	0.0	0.0
AHFC Dividend Payment	50.0	50.0	50.0	50.0
AHFC Bond Insurance Fund Closeout (6)	0.0	20.0	0.0	0.0
AIDEA Dividend Payment (7)	15.0	16.0	0.0	0.0
TOTAL RESTRICTED TO UNRESTRICTED	69.1	104.2	52.4	52.4
NET ADJUSTMENTS TO GENERAL FUND UNRESTRICTED REVENUE	3.2	43.1	(12.8)	(13.5)
UNRESTRICTED GENERAL FUND REVENUE (from Table 3)	2494.9	2080.9	2000.4	1976.1
NET DISPOSABLE GENERAL FUND UNRESTRICTED REVENUE	2498.1	2124.0	1987.6	1962.6

<sup>(1)</sup> These taxes and fees are collected by the state and some or all of the taxes or fees are paid to municipalities.

<sup>(2)</sup> Because the 1996 landing tax has not yet been shared in FY 1997, the \$4.1 million is an estimate. Although the 1996 landing tax will not be shared until FY 1998, it is shown as FY 1997 revenue.

<sup>(3)</sup> This tax is collected by the state but has always been appropriated to provide funding for qualified regional aquaculture associations.

<sup>(4)</sup> These charges for services are unrestricted General Fund revenue, but for budget planning are treated as restricted revenue.

<sup>(5)</sup> Estimated year of payment.

<sup>(6)</sup> An additional \$7.6 million is included under corporation receipts in Table 5 for FY 1998 (for a total AHFC Insurance Fund Closeout payment of \$27.6 million).

<sup>(7)</sup> The projected AIDEA dividends of \$16 million in FY 1999 and FY 2000 are assumed to be restricted corporation receipts.

### Table 5. TOTAL REVENUE RECOGNIZED BY THE EXECUTIVE BUDGET ACT

(\$ Million)

Many restricted and non-General Fund revenue sources are annually appropriated under the Executive Budget Act. Much of this revenue is restricted for specific uses (e.g. most federal funds) or may only be appropriated under certain conditions (e.g. the Constitutional Budget Reserve Fund). Permanent Fund net income may be legally appropriated in the same manner as unrestricted revenue, but the established practice has been to treat Permanent Fund net income as if it were restricted. Other revenue sources are either constitutionally dedicated or automatically deposited into a specific account, such as undistributed Permanent Fund net income.

The table below shows all of the state's revenue sources except for pension fund earnings, municipal bond proceeds, inter-fund transfers where the state has received no new net revenue, and earnings from the Alaska Railroad. Data for FY 1999 will be available in our spring forecast.

### RESTRICTED GENERAL FUND AND OTHER REVENUE SOURCES

	Prelim ACTUAL	
	FY 1997	FY 1998
Appropriated		
Federal Funds	1093.3	1113.9
Mental Health Trust Authority (MHTA)	7.2	8.0
Corporate Receipts Subject to Executive Budget Act (1)	107.2	133.9
Other Sources Net of Duplication (2)	378.2	354.2
Permanent Fund Dividends and Inflation Proofing	<u>1235.0</u>	<u>1335.1</u>
Appropriated Total	2820.9	2945.1
Non-Appropriated or Appropriated Under Special Conditions		
Dedicated Funds (3)	355.0	299.8
Constitutional Budget Reserve (CBR) Earnings and Estimated Settlements (4)	722.0	533.8
Permanent Fund Undistributed Net Income (5)	829.2	<u> 288.4</u>
Non-Appropriated Total	1906.2	1122.0
TOTAL RESTRICTED AND OTHER FUNDS	4727.1	4067.1
NET DISPOSABLE GENERAL FUND UNRESTRICTED REVENUE	2498.1	2124.0
TOTAL REVENUES FROM ALL FUND SOURCES	7225.2	6191.1

- (1) All quasi-independent corporations are subject to the Executive Budget Act except the Alaska Railroad Corporation.
- (2) Includes University of Alaska receipts, international airport and marine highway receipts, and retirement fund distributions. FY 1998 includes statutory designated program receipts, Alaska Public Utilities Commission and test fisheries receipts.
- (3) Funds include: the School Fund, Public School Trust Fund, Fish and Game Fund, Fisherman's Sick and Disabled Fund, Second Injury Fund, University of Alaska Trust Fund, FICA Administration Fund and Permanent Fund dedication.
- (4) Constitutional Budget Reserve Fund (CBRF) revenue projections include \$270 million in estimated petroleum tax and royalty settlements for FY 1998.
- (5) Source: FY 1997, Alaska Permanent Fund Corporation 1997 Annual Report; FY 1998 Alaska Department of Revenue Permanent Fund model projections.

### Table 6. CONSTITUTIONAL BUDGET RESERVE FUND AND ALASKA PERMANENT FUND (\$ Million)

The fall 1997 revenue forecast for the Constitutional Budget Reserve Fund and the Alaska Permanent Fund are summarized below.

	Prelim Actua	ai .	
	FY 1997	FY 1998	FY 1999
CONSTITUTIONAL BUDGET RESERVE FUND SUMMARY			
Beginning Balance (1)	2,518.0	3,171.7	3,475.9
Earnings (2)	155.4	263.8	256.8
Petroleum Tax and Royalty Settlements (3)	566.6	270.0	270.0
General Fund Surplus/ Deficit (appropriated to fill gap) (	4) <u>66.4</u>	(229.6)	(400.0)
Ending Balance	3,171.7	3,475.9	3,602.7
ALASKA PERMANENT FUND SUMMARY (5)			
<u>Principal</u>			
Beginning Balance (Cost Basis )	16,176.5	17,795.0	18,595.8
Dedicated Petroleum Revenue	308.4	231.4	232.4
Inflation Proofing	485.7	545.4	569.7
Deposits to Principal (6)	<u>824.4</u>	***************************************	***************************************
End-of-Year Balance (Cost Basis)	17,795.0	18,595.8	19,422.9
Earnings and Earnings Reserve			
ERA Beginning Balance (Cost Basis)	103.9	106.9	371.2
Net Income (7)	2,064.2	1,623.4	1,710.7
Dividend Payout	(749.3)	(789.7)	(852.5)
Inflation Proofing	(485.7)	(545.4)	(569.8)
Deposits to Principal (6)	(824.4)	(24.0)	(25.0)
Other Appropriations (8)	(1.8)	<u>0.0</u>	<u>0.0</u>
ERA End-of-Year Balance (Cost Basis)	106.9	371.2	634.6
Market Value			
Principal End-of-Year (Cost Basis)	17,795.0	18,595.8	19,422.9
ERA End-of-Year Balance (Cost Basis)	106.9	371.2	634.6
End-of-Year Unrealized Earnings	<u>3,153.1</u>	<u>3,295.4</u>	<u>3,452.0</u>
End-of-Year Balance (Market Value)	21,055.0	22,262.4	23,509.5

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- (1) FY 1997 beginning balance reconciled to the Annual Financial Report. Subsequent years are estimates.
- (2) Earnings rate assumed to be 7.16 percent.
- (3) Settlement estimates provided by the Department of Revenue and Department of Law.
- (4) FY 1997 surplus appropriated to the General Fund in the FY 1998 budget. FY 1999 deficit is a plug number. The Governor's preliminary budget plan will be issued on December 15, 1997. FY 1997 Ending Balance does not equal column total due to sweep provisions.
- (5) Source: FY 1997, Alaska Permanent Fund Corporation 1997 Annual Report; subsequent years, Alaska Department of Revenue Permanent Fund model projections.
- (6) Includes legislative appropriations from the Earnings Reserve Account (ERA) plus certain earnings derived from royalty litigation settlement payments that cannot legally be used to pay Permanent Fund dividends.
- (7) Rate of return assumed to be 8.4 percent per capital market assumption developed by Callan's, the Permanent Fund Corporation's investment advisor.
- (8) Includes escrow for Beaufort Sea litigation and Department of Law.

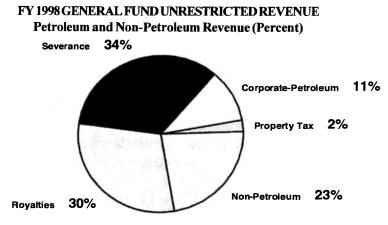
### PETROLEUM REVENUE OVERVIEW

Petroleum revenue has provided over 75 percent of the state's General Fund unrestricted revenue for the past nineteen years, and accounted for 81 percent of total General Fund unrestricted revenue in FY 1997. We project petroleum revenue continuing to comprise the majority of Alaska's General Fund unrestricted revenue: 77 percent in FY 1998, 78 percent in FY 1999, and 77 percent in FY 2000.

The majority of General Fund revenue will continue to come from petroleum in the form of: (1) severance (or production) taxes; (2) oil and gas royalties on state and federal land; (3) petroleum corporation income tax; (4) petroleum property tax; and (5) petroleum rents and lease bonuses. Alaska's North Slope contributes the majority of the state's petroleum revenue, generating 96 percent of total petroleum revenue in FY 1997.

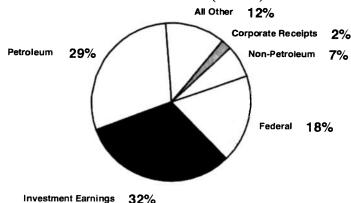
The figure below shows the break-out of FY 1998 projected petroleum and non-petroleum General Fund unrestricted revenue.

Figure 5.



Traditionally, state revenue has been primarily stated in General Fund terms since these are the funds the legislature exercises complete discretion over. The total revenue picture includes other sources such as federal funds and dedicated revenues. Figure 6 shows a total fund perspective that yields a different view of the proportion of state revenue derived from all sources. In total funds terms, investment earnings (32 percent) are the largest source of state revenue. Investment earnings include Permanent Fund net income, CBRF earnings, and General Fund interest. The various petroleum revenues (29 percent) and federal revenue (18 percent) make up the bulk of the remainder.

Figure 6. FY 1998 TOTAL REVENUE RECOGNIZED BY THE EXECUTIVE BUDGET ACT All Revenue Sources (Percent)



### **CURRENT MARKET SITUATION**

Alaska North Slope (ANS) crude oil prices have averaged roughly \$18/barrel over the first four months of FY 1998. Concern over the adequacy of oil stockpiles and heighted tension in the Persian Gulf due to Iranian fly-overs of the Iraqi no-fly zone have kept ANS oil prices over the \$19/barrel mark for most of October. Iraq continues to export roughly 900,000 barrels/day of "humanitarian" oil. Future oil prices over the near term will depend in large measure on the severity of the winter in the Northern Hemisphere.

This forecast assumes that oil prices will move down from current levels through the winter and bottom out by spring, with ANS averaging \$18/barrel again by next March. We assume in this forecast that the partial embargo on Iraqi exports remains in place. The future of the Iraqi embargo is the subject of ongoing United Nations discussions.

### Organization of Petroleum Exporting Countries (OPEC)

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OPEC is currently estimated to be producing 27.8 million barrels/day of crude oil. This is 2.8 million barrels/day over its quota of 25 million barrels/day. Venezuela, Nigeria and Iraq account for almost 1.7 million barrels/day of the over-quota production.

OPEC will meet in Jakarta, Indonesia, on November 26, when the issue of increasing quotas will no doubt be considered. So far, even with increased production from non-OPEC producers, robust crude oil demand has absorbed the increase in OPEC production. The severity of this winter's weather and the size of the anticipated increases in non-OPEC production will dictate the extent to which OPEC may need to act to prevent a serious decline in oil prices. This forecast assumes that Iraq will continue to be constrained to exporting \$1 billion worth of crude oil every three months.

Table 7. OPEC PRODUCTION (Million Barrels /Day)

Country	September 1997	1997 Quota	Over/(Under) Quota
Algeria	0.845	0.750	0.095
Indonesia	1.493	1.330	0.163
Iran	3.700	3.600	0.100
Iraq	1.600	1.200	0.400
Kuwait (1)	2.100	2.000	0.100
Libya	1.420	1.390	0.030
Nigeria	2.250	1.865	0.385
Qatar	0.660	0.378	0.282
Saudi Arabia (1)	8.200	8.000	0.200
UAE	2.300	2.161	0.139
Venezuela	<u>3.250</u>	<u>2.359</u>	<u>0.891</u>
TOTAL	27.818	25.033	2.785

<sup>(1)</sup> Share output in Neutral Zone.

Source: Platts Oilgram Price Report, October 14, 1997

### Alaska North Slope

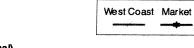
FY 1997 ANS West Coast spot oil prices averaged \$20.85/barrel. Prices began to fall dramatically last February, from a January average of \$23.57/barrel to a June average of \$17.28/barrel. FY 1998 prices have averaged roughly \$18/barrel through October 1997. Currently, roughly 95 percent of ANS production is sold either in Alaska or for West Coast or Hawaii delivery. Most of the remaining 5 percent is exported to Asia.

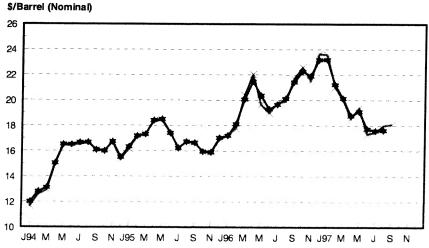
The ANS export market has turned out to be seasonal, with sales peaking in the winter heating months and declining in the summer. This meshes well with the U.S. West Coast consumption pattern, where the summer driving season is the high demand time of the year. This forecast assumes that exports will average between 70,000 and 80,000 barrels/day over the next three years. We assume that the export price will average roughly \$.20/barrel less than the ANS West Coast spot price. Diverting sales from U.S. Gulf Coast markets to the closer Asian market will continue to enhance the netback value of ANS production. We estimate that the ability to export will mean an additional \$10 million per year to the state treasury in transportation cost savings alone. Econometric analysis suggests that the export ban may also be worth an additional \$40 million annually in terms of higher West Coast oil prices. As ANS production falls, so will exports. With the assumed rate of higher production in this forecast, exports will continue to be economically attractive through FY 2003.

Figure 7.

### HISTORICAL ANS SPOT PRICES

(\$/Barrel)





### **METHODOLOGY**

### ANS OIL PRICE AND PRODUCTION FORECAST ASSUMPTIONS

The Department of Revenue uses a variety of models and techniques to prepare the revenue forecast. The main petroleum forecasting model is a marketing and production model that projects severance taxes and royalties on a field-by-field basis.

Key assumptions for our fall 1997 forecast are represented in Table 8 on Page 24. Inflation rates were developed by the Department of Revenue, Department of Labor, and Office of Management and Budget. Production assumptions were developed by the Department of Revenue from information provided by the producing companies, the Alaska Department of Natural Resources, and the Alaska Oil and Gas Conservation Commission. Trans-Alaska Pipeline Systems (TAPS) tariffs are the result of the application of the Taps-Settlement Methodology (TSM) and are based on the most recent TAPS filings. Oil price assumptions were developed by the Department of Revenue with the assistance of state economists and investment professionals from the Department of Natural Resources, Department of Labor, Office of Management and Budget, and the University of Alaska.

In this forecast, we discuss only one of the many possible future price and production scenarios: the reference case. To assist in examining other possible outcomes, we have developed a revenue matrix to provide estimates for state General Fund unrestricted revenue for various alternative ANS price and production levels in FY 1998-2000. These sensitivity matrices are provided on Page 32.

### **Market Price**

The Department of Revenue relies on spot oil prices as reported in *Platt's Oilgram Price Report*. Currently, prices reported by the North Slope producers for severance tax and royalty purposes closely track spot oil prices. Actual royalties are paid based on a value that is determined by a market basket of crude oil prices that includes the ANS spot price.

Our fall 1997 reference case projections for ANS market prices (the average of sales prices to the U.S. West Coast, U.S. Gulf Coast and Asian market destinations) are listed in Table 8 on Page 22.

### **Transportation Costs**

Marine transportation costs to ship ANS production to markets are expected to increase over time due to the phase-in of new tanker hull requirements under the federal Oil Pollution Act of 1990. We expect a roughly \$.15/barrel increase in tanker costs starting in FY 2000 and \$.60/barrel in FY 2005 as a result of this required new capital investment. At the same time, we expect that ANS shipments over time will increasingly be for strictly West Coast destinations, which will eliminate the higher-cost shipping requirements for export and U.S. Gulf Coast markets.

### Trans-Alaska Pipeline System (TAPS) Tariffs

The TAPS tariff is determined according to the TAPS Settlement Methodology, a rate-making method approved by the Federal Energy Regulatory Commission that allows the TAPS owners to recover their costs, including an allowance for profit.

TAPS tariffs are filed on a calendar year basis with new tariffs taking effect January 1 each year. The expected tariff filing for calendar year 1998 is \$2.78/barrel. Table 8 on the next page contains projected tariffs for FY 1999-2020.

### Feeder Pipeline Costs

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Table 8 also contains projected pipeline costs. Certain additional transportation costs are also incurred to move the various crude oils that comprise ANS to the trans-Alaska pipeline system. These include both feeder pipeline charges and other cost adjustments to account for the different qualities of oil entering the pipeline.

### Wellhead Price

The combination of ANS wellhead value and production by field is the basis for both state severance taxes and royalties. The wellhead value by field is calculated by subtracting the relevant pipeline tariff and marine transportation costs (as well as adjustments for North Slope feeder pipelines and pipeline quality bank) from the sales price.

Table 8.

### FALL 1997 REFERENCE CASE FORECAST ASSUMPTIONS

	Inflation	ANS	Marine	TAPS	Feeder	ANS
	Rate	Market	Transportatio	n Tariff	Pipeline	Wellhead
	(Percent)	(\$/ Barrel)	(\$/ Barrel)	(\$/ Barrel)	(\$/ Barrel)	(\$/ Barrel)
Prelim ACTUAL 1997	2.8	20.85	1.64	2.76	0.03	16.43
1998	2.8	18.11	1.73	2.66	0.07	13.64
1999	2.8	18.22	1.69	2.71	0.14	13.68
2000	2.8	18.34	1.95	2.63	0.19	13.57
2001	2.8	18.93	1.93	2.60	0.19	14.21
2002	2.8	19.50	1.88	2.70	0.19	14.73
2003	2.8	20.12	1.78	2.81	0.18	15.35
2004	2.8	20.75	1.81	2.95	0.18	15.81
2005	2.8	21.39	2.44	3.12	0.18	15.65
2006	2.8	22.08	2.49	3.31	0.18	16.10
2007	2.8	22.79	2.54	3.49	0.18	16.58
2008	2.8	23.53	2.59	3.67	0.18	17.09
2009	2.8	24.29	2.64	3.82	0.18	17.65
2010	2.8	25.08	2.69	3.99	0.18	18.22
2011	2.8	25.94	2.74	4.24	0.17	18.79
2012	2.8	26.83	2.79	4.01	0.17	19.86
2013	2.8	27.76	2.85	4.28	0.17	20.46
2014	2.8	28.72	2.91	4.57	0.17	21.07
2015	2.8	29.72	2.96	4.94	0.17	21.65
2016	2.8	30.79	3.02	5.27	0.17	22.33
2017	2.8	31.91	3.09	5.66	0.17	22.99
2018	2.8	33.07	3.15	6.07	0.17	23.68
2019	2.8	34.28	3.21	6.65	0.14	24.28
2020	2.8	35.55	3.28	7.13	0.14	25.00

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### **Production**

The production assumptions for Alaska's North Slope were developed on a field-by-field specific basis. Long-term production assumptions are made for all discoveries currently under development or being evaluated for future development. The production forecast is based on company-assessed proven and probable reserves, development plans where available, and assessments by technical personnel at the Department of Revenue, Department of Natural Resources, and the Alaska Oil and Gas Conservation Commission with respect to enhanced recovery opportunities.

The fall forecast includes detailed projections for oil discoveries announced by the industry during the past year. These discoveries represent nearly one-fourth of the total ANS production projected by FY 2002. The new fields include Alpine, Badami, Northstar, Tarn, Liberty, West Sak, Sourdough and the various satellite discoveries at or near Prudhoe Bay and Kuparuk. Production from some of these fields is anticipated in the next two months.

FY 1998 production has been revised to account for delays in satellite field development, warmer than expected ambient temperatures on the North Slope so far this year, downtime associated with decommissioning two TAPS pump stations, and delays in hooking up new wells at the Milne Point Unit. Most of the 48,000 barrels/day reduction from our spring forecast represents deferred production that will be picked up in FY 1999 and beyond.

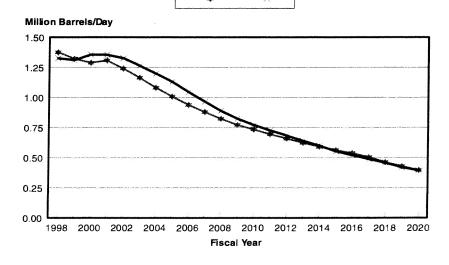
Over the long term, we expect that ANS production will increase to 1.355 million barrels/day in FY 2000 and then begin to decline again by FY 2002, declining at an average rate of roughly 6 percent annually.

The Economic Limit Factor (ELF) is assumed to continue to decrease as our large oil fields are depleted (see Figure 2 on Page 11). The average oil production tax rate is forecast to fall from 12 percent in FY 1998 to 10.5 percent by FY 2000 and to 7.6 percent FY 2005.

Figure 8.

### ANS OIL AND NGL PRODUCTION (Million Barrels/Day)





### ALASKA OIL AND NGL PRODUCTION

(Million Barrels/Day)

Prelim ACTUAL

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		FY 1997	FY 1998	FY 1999	
Alaska No	orth Slope				
<u>Oil</u>	Prudhoe Bay	0.7412	0.6793	0.6305	
	Kuparuk	0.2667	0.2643	0.2600	
	Milne Point	0.0471	0.0537	0.0623	
	Endicott/ Sag Delta	0.0647	0.0595	0.0541	
	Lisburne	0.0110	0.0081	0.0098	
	Alpine	0.0000	0.0000	0.0200	
	North Star	0.0000	0.0000	0.0000	
	Niakuks (1)	0.0284	0.0312	0.0278	
	West Sak	0.0000	0.0013	0.0070	
	Point McIntyre	0.1630	0.1508	0.1205	
	Prudhoe Bay and Kuparuk Satellites	0.0003	0.0003	0.0100	
	Tarn	0.0000	0.0000	0.0100	
	Schrader Bluff	0.0039	0.0044	0.0055	
	West Beach	0.0014	0.0008	0.0019	
	Badami	0.0000	0.0000	0.0175	
	Sag River	0.0013	0.0018	0.0060	
	Total ANS Oil	1.3290	1.2554	1.2428	
NGLs	Prudhoe Bay	0.0679	0.0608	0.0585	
	Endicott/ Sag Delta	0.0032	0.0041	0.0039	
	Lisburne	0.0016	0.0010	0.0014	
	Niakuks (1)	0.0003	0.0005	0.0005	
	Point McIntyre	0.0025	0.0029	0.0023	
	West Beach	0.0001	0.0001	0.0002	
	Total ANS NGLs	0.0755	0.0693	0.0668	
Liquids	Prudhoe Bay	0.8091	0.7400	0.6890	
	Kuparuk	0.2667	0.2643	0.2600	
	Milne Point	0.0471	0.0537	0.0623	
	Endicott/ Sag Delta	0.0678	0.0635	0.0580	
	Lisburne	0.0126	0.0091	0.0111	
	Alpine	0.0000	0.0000	0.0200	
	North Star	0.0000	0.0000	0.0000	
	Niakuks (1)	0.0287	0.0317	0.0283	
	West Sak	0.0000	0.0013	0.0070	
	Point McIntyre	0.1655	0.1538	0.1228	
	Prudhoe Bay and Kuparuk Satellites	0.0003	0.0003	0.0100	
	Tarn	0.0000	0.0000	0.0100	
	Schrader Bluff	0.0039	0.0044	0.0055	
	West Beach	0.0015	0.0009	0.0021	
	Badami	0.0000	0.0000	0.0175	
	Sag River	0.0013	0.0018	0.0060	
	Total ANS Oil	1.4045	1.3247	1.3095	
Cook Inlet		0.0369	0.0320	0.0282	
OTALALASKA		1.4414	1.3567	1.3377	

<sup>(1)</sup> Includes Niakuk, West Niakuk (27), Niakuk 28, and Niakuk 29.

### OTHER PETROLEUM AND NON-PETROLEUM REVENUE FORECAST ASSUMPTIONS

The non-petroleum revenues are projected based on trend extrapolation, econometric analysis and assessment by state economists and resource and financial managers.

### **Petroleum Corporation Income Tax**

The projected decrease of \$53.4 million from FY 1997 (\$269.4 million) to FY 1998 (\$216 million) is a result of assumed lower crude oil prices in FY 1998. Alaska petroleum income tax revenue is a function of two factors: (1) the size of the oil and gas corporations' Alaska petroleum activity relative to their activity worldwide, and (2) their total net worldwide earnings. Petroleum income tax revenue will stay flat through FY 2000 and decline slowly till FY 2005. After FY 2005, Alaska petroleum income tax revenue will decline at a more rapid pace because of larger reductions in the relative size of Alaska oil and gas corporation activity compared with their worldwide activity.

### **General Corporation Income Tax**

The non-petroleum income tax revenue of \$48.4 million in FY 1997 is \$3.7 million higher than the five-year average (FY 1992-1996) of \$44.7 million. General corporation income taxes are a function of two factors: (1) the relative size of corporations' Alaska-versus-U.S. activity, and (2) their total U.S. net earnings. General corporation income tax collections are projected to show an increase of \$3.2 million in FY 1998 and then grow at the same pace as the Alaska economy.

### **Petroleum Property Tax**

Oil and gas property tax is levied at 20 mills on the full and true value of taxable property. The amount of this tax will continue to decline as new investments in oil facilities fail to keep pace with the depreciation of existing facilities. The table below shows the distribution of the petroleum property tax between local communities and the state for FY 1997.

Table 10.

### FY 1997 PETROLEUM PROPERTY TAX (\$ Million)

Borough	Gross Tax	Local Tax	State Tax
North Slope	229.30	212.22	17.08
Unorganized	30.56	N/A	30.56
Valdez	13.85	13.79	0.06
Kenai	11.68	7.43	4.26
Fairbanks	6.00	4.66	1.34
Anchorage	0.89	0.84	0.06
Matanuska-Susitna	0.10	0.08	0.03
Cordova	0.06	0.04	0.02
Whittier	0.01	0.00	0.01
TOTAL	292.47	239.06	53.41

Total cashflow collections may not match final accounting in AKSAS

### **Excise Tax**

### Alcohol and Tobacco

Alcohol tax collections were down slightly in FY 1997 due to a decrease in the number of gallons of liquor sold. We project that revenue will return to just below its five-year (from FY 1992-1996) average of \$12 million in FY 1998 and then grow slowly over the long term.

On October 1, 1997, the cigarette tax rate increased from \$.29 to \$1/pack (for 20 cigarettes), and the tax rate on other tobacco products (e.g cigars and smokeless) increased from 25 percent to 75 percent of the wholesale price. The revenue from the \$.71 cigarette tax rate increase will go to the School Fund and is included under restricted revenue (Table 5). The direct effect on the General Fund from the tax increase is small. The General Fund revenue collected from cigarettes will decline by \$1.6 million in FY 1999 due to a decrease in the consumption of cigarettes. This decrease will occur as a result of the large price increase. Revenue from the other tobacco products tax rate increase goes into the General Fund and is estimated to be \$2.6 million in FY 1999. We estimate that the net result will be a small increase in General Fund revenue from tobacco taxes. Over the long term the trend for tobacco revenue will be a small increase.

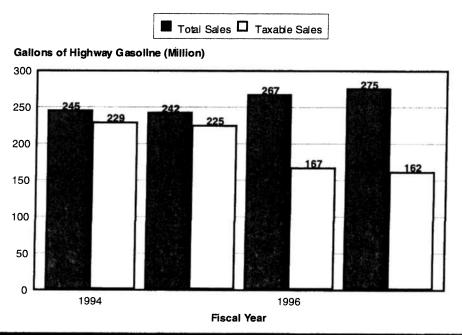
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### **Motor Fuel**

In July 1997, the following three changes were made to the Alaska motor fuel statute: (1) the gasohol exemption was repealed, (2) an exemption for marine bunker fuel was passed, and (3) the foreign flight exemption was expanded. The gasohol exemption resulted in approximately 90 million gallons of fuel being exempt from tax in FY 1997 (see Figure 9). With the repeal of this exemption, all of this fuel will now be taxed. However, during the months when gasohol use is mandated in the Anchorage area (November-February) the tax will drop from \$.08/gallon to \$.02/gallon. The net result is a projected increase in revenue from the highway motor fuel tax of \$5 million in FY 1998. However, aviation fuel and marine fuel revenue is projected to decrease by \$3.4 million due to the expansion of the foreign flight exemption and the exemption for marine bunker fuel. The net gain in motor fuel tax revenue in FY 1998 is projected to be \$1.6 million. The long-term outlook is for continued slow growth in motor fuel tax revenue.

Figure 9. TOTAL GALLONS OF GASOLINE SOLD VS. TAXABLE GALLONS



### Fisheries Business Tax

The downward trend in fisheries business tax revenue (\$31 million in FY 1997) is projected to continue through FY 1998 (see Table 11 below). The projected FY 1998 decrease is a result of low salmon prices and harvests. Additionally, herring prices dropped by over 70 percent in 1997. The long-term outlook for salmon prices and quantities is down from FY 1997, due to increased growth in salmon farms and hatcheries outside Alaska and increased international development and use of wild runs. The long-term outlook for shellfish is also poor because tanner crab will be in the downward portion of its natural cycle for the next three to four years.

Table 11.

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### FISHERIES BUSINESS TAX (\$ Million)

	FY 1997	ACTUAL	FY 1998	Projected	FY 1999-2000 Projected
	Value of Catch	Tax Revenue	Value of Catch	Tax Revenue	Change from FY 1998
	or Caten	Revenue	or Caten	Revenue	110111 FT 1990
Halibut	73	2.1	90	2.8	Catch Same/ Unit Value Same
Salmon	373	14.1	270	10.2	Catch Up/ Unit Value Up
Herring	60	2.3	15	0.6	Catch Same/ Unit Value Same
Shellfish	160	5.7	140	4.6	Catch Down/ Unit Value Up
Groundfish	<u>213</u>	<u>6.8</u>	<u>200</u>	<u>6.4</u>	Catch Same/ Unit Value Same
TOTAL	879	31.0	715	24.6	

### FALL 1997 REFERENCE CASE FORECAST

The following key assumptions about the economic fundamentals underpinning the oil market are the foundation for the oil price forecast. In this forecast we consider a single scenario for the short term (FY 1998-1999) and two scenarios for the long term (FY 2000-2020).

### Short-Term Oil Market Assumptions, FY 1998-1999

We assume that over the period FY 1998-1999, there is a continuation of the global economic expansion in both the developed and developing countries. As a result, we assume that global consumption of oil will increase by 1.4 million barrels/day in FY 1998 and 1.6 million barrels/day in FY 1999.

Non-OPEC production over this period is also assumed to continue to increase, growing by 1.1 million barrels/day in FY 1998 and FY 1999. As a result, the production required from OPEC under this scenario increases by 0.3 million barrels/day in FY 1998 and 0.5 million barrels/day in FY 1999. How OPEC manages to allocate this relatively modest increase in demand for its oil production will have important consequences for oil prices. There are two important issues that make OPEC's production allocation decision difficult. The first is the increase in production capacity in OPEC countries like Venezuela and the second is the return of Iraq to the marketplace with United Nations sanctioned exports of \$2 billion of oil every six months. Our specific key market assumptions follow:

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- 1. OECD (developed countries) oil consumption grows by 0.4 million barrels/day in FY 1998 and FY 1999. Non-OECD oil consumption grows by 1 million barrels/day in FY 1998 and by 1.2 million barrels/day in FY 1999.
- 2. Non-OPEC production grows by 1.1 million barrels/day in both FY 1998 and FY 1999.
- 3. The demand for OPEC black oil averages 26.6 million barrels/day in FY 1998 and 27.1 million barrels/day in FY 1999. OPEC oil production over FY 1997 averaged 26.6 million barrels/day with Iraq exporting in the second half of the year.
- 4. The key uncertainties in this forecast are the severity of the winter in the Northern Hemisphere and the extent to which the added production from Iraq puts downward pressure on oil prices. We assume that the added production from Iraq will insure that oil prices stay below \$20/barrel for ANS quality crude oil. It is further assumed that Middle East tensions and periodic non-OPEC supply disruptions will keep the price from falling below \$17/ barrel.

Table 12. FALL 1997 SHORT-TERM REFERENCE CASE
Key ANS Revenue, Price, and Production Projections

	General Fund	ANS Market	ANS
FY	Unrestricted Revenue	Price	Production
	(\$ Million)	(\$/Barrel)	(Million Barrels/ Day)
Prelim ACTUAL 1997	7 2494.9	20.85	1.405
1998	3 2080.9	18.11	1.325
1999	2000.4	18.22	1.310

### Long-Term Oil Market Assumptions, FY 2000-2020

The fall 1997 reference case forecast considers two scenarios: a low price (Constrained Demand) and a high-price scenario (Constrained Supply). The low-price scenario assumes that demand growth slows due to a combination of new carbon taxes, greater efficiencies in consumption, and increased consumer awareness of the global warming issue. The high-price scenario assumes that the demand for oil continues to grow robustly, putting modest pressure on supply availability, which results in increasing oil prices.

### Constrained Demand Scenario

- 1. A \$50/ton carbon tax is imposed on fossil fuels.
- OECD oil consumption grows at .5 percent per year, averaging 47.2 million barrels/day by 2020. Non-OECD consumption grows at 2.7 percent per year, averaging 57.8 million barrels/day by 2020.
- 3. Non-OPEC production grows at a rate of 1.3 percent per year reaching 60.4 million barrels/day by 2020.
- 4. As a result, OPEC production hits 44.7 million barrels/day by 2020.

### Constrained Supply Scenario

- 1. Oil consumption continues to grow on a one-for-one basis with global economic growth.
- OECD oil consumption grows at 2 percent per year, averaging 63.5 million barrels/day by 2020. Non-OECD consumption grows at 4.4 percent per year, averaging 79.8 million barrels/day by 2020.
- 3. Non-OPEC production grows at a rate of 1.9 percent per year, averaging 68.6 million barrels/day by 2020.
- 4. As a result, OPEC production averages 74.7 million barrels/day in 2020.

The oil prices in our reference case were developed by assuming that these two scenario were representative (in a broad way) of future oil markets. The oil prices assumed for each of these two scenarios were then weighted (the Contrained Demand, low price scenario, was given a 55 percent weight and the Constrained Capacity, high price scenario, was given a 45 percent weight) and averaged to reflect the likelihood that either one or the other of the two scenarios would occur.

Table 13. FALL 1997 LONG-TERM REFERENCE CASE
Key ANS Revenue, Price, and Production Projections

FY	General Fund Unrestricted Revenue (\$ Million)	ANS Market Price (\$/Barrel)	ANS Production (Million Barrels/ Day
2000	1976.1	18.34	1.355
2001	1979.0	18.93	1.354
2002	1959.7	19.5	1.326
2003	1919.8	20.12	1.264
2004	1871.1	20.75	1.198
2005	1769.0	21.39	1.129
2006	1696.8	22.08	1.045
2007	1623.8	22.79	0.964
2008	1558.8	23.53	0.889
2009	1499.3	24.29	0.823
2010	1462.4	25.08	0.772
2011	1425.6	25.94	0.726
2012	1416.7	26.83	0.684
2013	1383.5	27.76	0.640
2014	1359.5	28.72	0.599
2015	1330.9	29.72	0.553
2016	1310.2	30.79	0.520
2017	1286.0	31.91	0.488
2018	1265.5	33.07	0.458
2019	1237.1	34.28	0.419
2020	1221.5	35.55	0.394

Table 14.

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### REFERENCE CASE GLOBAL MARKET ASSUMPTIONS

(Million Barrels/Day)

					С	ONSTR			ND	CONSTRAINED CAPACITY								
	ACTUAL	1007	4000	4000	200	Lo) 2005 0	w Grov	•	2020	2000		h Grov	wth) 2015	2020				
DEMAND	1990	1997	1998	1999	 200	2005	2010	2015	2020	2000	2003	2010	2013	2020				
OECD																		
North America	20.3	20.7	21.0	21.3	21.4	21.9	22.4	23.0	23.6	21.7	23.9	26.4	29.2	32.2				
Europe	14.2	14.3			14.7	15.0	15.4	15.8	16.2	14.9	16.4	18.1	20.0	22.1				
Pacific	6.7	6.7		6.7	6.7	6.9	7.1	7.3	7.5	6.8	7.3	7.9	8.5	9.2				
Total OECD	-	41.7		42.5	42.8	43.8	44.9	46.1	47.2		47.7	52.5	57.7	63.5				
Non-OECD																		
CIS	4.3	4.2	4.2	4.2	4.2	4.3	4.4	4.5	4.7	4.4	5.3	6.5	7.9	9.6				
China	3.6	3.8	4.0	4.2	4.3	5.0	5.7	6.7	7.7	4.3	5.3	6.4	7.8	9.5				
Eastern Europe	1.4	1.5	1.5	1.5	1.5	1.6	1.7	1.8	1.9	1.6	1.7	1.9	2.1	2.3				
W. Hemisphere	6.4	6.6	6.8	7.1	7.4	8.5	9.9	11.5	13.3	7.4	9.0	11.0	13.4	16.3				
Africa	2.3	2.4	2.5	2.6	2.7	3.1	3.6	4.1	4.8	2.7	3.3	4.0	4.8	5.9				
Middle East	4.2	4.3	4.4	4.5	4.5	5.0	5.5	6.1	6.8	4.6	5.3	6.2	7.1	8.3				
Asia	8.6	9.1	9.6	10.1	10.4	12.0	13.9	16.1	18.7	10.6	13.5	17.2	22.0	28.0				
Total Non-OECD	30.8	31.9	32.9	34.1	35.0	39.5	44.8	50.9	57.8	35.5	43.4	53.1	65.1	79.8				
TOTAL DEMAND	72.0	73.6	75.1	76.7	77.7	83.4	89.8	96.9	105.1	78.9	91.1	105.6	122.81	143.3				
SUPPLY																		
Non-OPEC																		
OECD	18.4	18.7	19.0	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4				
CIS	7.1	7.2	7.2	7.2	7.3	7.7	8.1	8.5	8.9	7.6	9.7	12.4	13.0	13.0				
China	3.1	3.2	3.3	3.4	3.4	3.7	4.0	4.3	4.6	3.4	3.7	4.0	4.3	4.6				
Eastern Europe	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3				
LDCs	13.2	13.7	14.1	14.6	14.9	16.5	18.2	20.1	22.2	15.2	18.5	22.5	26.4	26.4				
Processing Gain	1.5	1.6	1.7	1.8	1.9	2.4	3.0	3.9	4.9	1.9	2.4	3.0	3.9	4.9				
Total NonOPEC	43.6	44.6	45.7	46.8	47.3	50.0	53.0	56.5	60.4	47.8	54.0	61.7	67.2	68.6				
OPEC																		
Oil	25.8	26.6	26.6	27.1	27.6	30.5	33.7	37.4	41.5	28.2	34.2	40.9	52.5	71.5				
NGLs	2.6	2.8	2.8	2.8	2.8	2.9	3.0	3.1	3.1	2.8	2.9	3.0	3.1	3.1				
Total OPEC	28.4	29.4	29.4	29.9	30.5	33.4	36.7	40.5	44.7	31.0	37.1	43.9	55.5	74.7				
Inventory Change		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL SUPPLY	72.0	74.0	75.1	76.7	77.7	83.4	89.8	96.9	105.1	78.9	91.1 1	05.6	122.81	43.3				

Table 15.

### GENERAL FUND UNRESTRICTED REVENUE Sensitivity Matrices for Annual Price and Production (\$ Million)

FY 1998

		ANS Production (Million Barrels/ Day)												
ANS Market	1.200	1.250	1.300	1.350	1.400	1.450								
(\$/ Barrel)														
\$15	1699	1733	1767	1800	1834	1868								
\$16	1783	1821	1860	1898	1937	1975								
\$17	1866	1910	1953	1996	2039	2083								
\$18	1950	1998	2046	2094	2142	2190								
\$19	2033	2086	2139	2192	2245	2297								
\$20	2117	2175	2232	2290	2347	2405								
\$21	2200	2263	2325	2388	2450	2512								

· August

FY 1999

		ANS Production (Million Barrels/ Day)												
ANS Market	1.200	1.250	1.300	1.350	1.400	1.450								
(\$/ Barrel)														
\$15	1632	1668	1704	1740	1776	1812								
\$16	1715	1754	1794	1833	1873	1912								
\$17	1798	1841	1883	1926	1969	2012								
\$18	1880	1927	1973	2019	2066	2112								
\$19	1963	2013	2063	2113	2163	2212								
\$20	2046	2099	2153	2206	2259	2313								
\$21	2129	2185	2242	2299	2356	2413								

FY 2000

			ANS Produ	ction (Million I	Barrels/ Day)	
ANS Market	1.200	1.250	1.300	1.350	1.400	1.450
(\$/ Barrel)						
\$15	1575	1609	1642	1676	1709	1742
\$16	1654	1691	1728	1764	1801	1838
\$17	1733	1773	1813	1853	1893	1933
\$18	1811	1855	1898	1942	1985	2028
\$19	1890	1937	1983	2030	2077	2123
\$20	1969	2019	2069	2119	2169	2219
\$21	2048	2101	2154	2207	2261	2314

Figure 10.

### GENERAL FUND UNRESTRICTED REVENUE, Nominal Dollars Actual (FY 1982-1997) and Projected (FY 1998-2020)



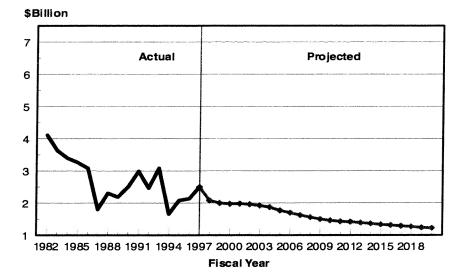


Figure 11.

### GENERAL FUND UNRESTRICTED REVENUE, Real 1997 Dollars Actual (FY 1982-1997) and Projected (FY 1998-2020)

Real 1997 \$

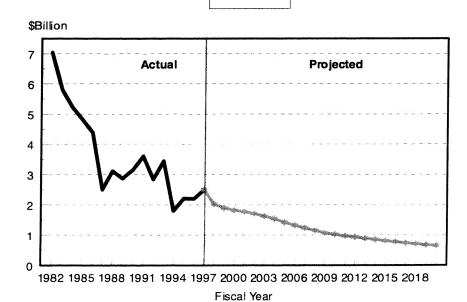


Table 16.

# PETROLEUM SEVERANCE TAX AND ROYALITY REVENUE FORECAST (\$ Million)

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DETAILED REVENUE PROJECTIONS (\$ Million)

UNRESTRICTED	GENERAL FUND	REAL \$97		2494.9	2024.2	1892.9	1819.0	1772.0	1706.9	1626.6	1542.2	1418.3	1323.4	1231.9	1150.4	1076.4	1021.3	968.5	936.3	889.4	850.1	9.608	775.3	740.2	708.6	673.8	647.2
UNN.	B B	NOMINAL		2494.9	2080.9	•	•	•	1959.7	1919.8	1871.1	•	1696.8	•				1425.6		1383.5			1310.2	1286.0	•	_	1221.5
	PSF (2)	Dedication Dedication		5.3	4.3	4.2	4.3	4.5	4.6	4.6	4.6	4.3	4.1	3.9	3.8	3.6	3.5	3.4	3.4	3.3	3.3	3.2	3.1	3.0	3.0	2.8	2.8
	PF (1)	Dedication		308.4	231.4	232.4	244.5	258.3	263.2	260.1	253.9	236.3	226.1	215.9	207.1	198.7	193.0	187.2	187.5	181.8	177.7	171.5	168.3	163.9	160.3	150.8	148.2
TOTAL (1) (2)	Before PF & PSF	Dedication		2808.6	2316.6	2237.1	2224.9	2241.8	2227.6	2184.5	2129.5	2009.5	1927.0	1843.6	1769.6	1701.5	1659.0	1616.2	1607.7	1568.6	1540.5	1505.6	1481.5	1452.9	1428.7	1390.8	1372.4
	TOTAL	NonPETRO		484.7	475.8	445.6	448.4	451.5	453.9	455.6	457.4	459.3	461.4	463.5	465.7	468.1	470.6	473.1	475.9	478.6	481.6	484.7	487.9	491.2	494.7	498.3	502.2
	Mineral	Royalties PETROLEUM Rents/Bonuses NonPETRO		14.3	8.3	7.7	9.0	0.6	9.1	9.1	9.1	9.5	9.2	9.2	9.3	9.3	9.3	9.4	9.4	9.4	9.5	9.5	9.5	9.6	9.6	9.6	9.7
	TOTAL	PETROLEUM		2309.7	1832.5	1783.8	1767.5	1781.2	1764.6	1719.8	1663.0	1541.1	1456.5	1370.8	1294.6	1224.2	1179.0	1133.8	1122.4	1080.6	1049.4	1011.4	984.1	952.1	924.5	882.8	9.098
	Gross			1065.1	854.5	847.6	864.6	896.7	926.9	926.8	911.7	852.7	818.8	783.3	751.4	720.9	700.9	677.3	680.1	660.3	650.1	630.5	619.2	603.6	591.1	564.3	555.0
	Petroleum	Corp Tax	l		216.0	216.0	216.0	209.5	203.2	197.1	191.2	185.5	174.4	163.9	154.1	144.8	136.1	128.0	120.3	113.1	106.3	99.9	93.9	88.3	83.0	78.0	73.3
	Property	Цах	,	53.6	51.0	49.3	47.5	45.4	43.1	40.9	38.7	36.7	34.7	32.8	31.0	29.2	27.3	25.6	24.0	22.5	21.2	20.0	18.8	17.7	16.5	15.4	14.4
	Production Property	Тах	0	921.6	711.0	6.079	639.4	629.6	591.3	555.0	521.3	466.2	428.6	390.9	358.2	329.2	314.7	302.9	298.0	284.7	271.8	261.0	252.1	242.5	233.9	225.1	217.9
	<b>₽</b>			Prelim ACTUAL 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	5000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

(1) Permanent Fund.

<sup>(2)</sup> Public School Fund.

### PROJECTED AND HISTORICAL CRUDE OIL PRICES

(\$/Barrel-Nominal and Real \$1997)

	ANS I	Market	ANS W	est Coast	ANS We	ellhead	West Texas	s Intermediate
	Nominal	Real97	Nominal	Real97	Nominal	Real97	Nominal	Real97
1985	27.89	41.24	N/A	N/A	17.37	25.69	28.15	41.63
1986	22.03	31.44	N/A	N/A	12.41	17.71	23.11	32.98
1987	14.98	20.82	N/A	N/A	7.84	10.90	16.14	22.43
1988	16.45	22.19	16.12	21.74	10.68	14.40	18.53	24.99
1989	14.80	19.41	14.61	19.16	9.55	12.52	16.93	22.20
1990	17.34	21.81	17.22	21.66	11.89	14.96	20.06	25.23
1991	21.72	26.23	21.57	26.05	15.38	18.57	24.95	30.13
1992	16.88	19.47	16.64	19.19	11.20	12.92	20.69	23.86
1993	17.93	20.06	17.83	19.95	12.80	14.32	20.69	23.15
1994	14.22	15.45	14.05	15.26	9.57	10.40	16.69	18.13
1995	16.83	17.84	16.77	17.77	11.51	12.20	18.46	19.57
1996	17.77	18.30	17.74	18.27	12.60	12.98	19.20	19.77
1997	20.85	20.85	20.90	20.90	16.43	16.43	22.54	22.54
1998	18.11	17.62	18.24	17.74	13.64	13.27	19.79	19.25
1999	18.22	17.24	18.23	17.25	13.68	12.95	19.78	18.72
2000	18.34	16.88	18.35	16.89	13.57	12.49	19.91	18.32
2001	18.93	16.95	18.93	16.95	14.21	12.72	20.53	18.39
2002	19.50	16.99	19.51	17.00	14.73	12.83	21.17	18.44
2003	20.12	17.05	20.12	17.05	15.35	13.00	21.83	18.50
2004	20.75	17.10	20.75	17.10	15.81	13.03	22.51	18.55
2005	21.39	17.15	21.39	17.15	15.65	12.55	23.21	18.61
2006	22.08	17.22	22.08	17.22	16.10	12.56	23.96	18.69
2007	22.79	17.29	22.79	17.29	16.58	12.58	24.73	18.76
2008	23.53	17.37	23.53	17.36	17.09	12.61	25.53	18.84
2009	24.29	17.44	24.29	17.44	17.65	12.67	26.35	18.92
2010	25.08	17.52	25.08	17.51	18.22	12.73	27.21	19.00
2011	25.94	17.62	25.94	17.62	18.79	12.76	28.14	19.12
2012	26.83	17.73	26.83	17.73	19.86	13.12	29.11	19.24
2013	27.76	17.85	27.76	17.84	20.46	13.15	30.12	19.36
2014	28.72	17.96	28.72	17.96	21.07	13.18	31.16	19.48
2015	29.72	18.08	29.72	18.08	21.65	13.17	32.24	19.61
2016	30.79	18.22	30.79	18.22	22.33	13.22	33.41	19.77
2017	31.91	18.37	31.91	18.37	22.99	13.24	34.62	19.93
2018	33.07	18.52	33.07	18.52	23.68	13.26	35.88	20.09
2019	34.28	18.67	34.28	18.67	24.28	13.22	37.20	20.26
2020	35.55	18.84	35.55	18.84	25.00	13.25	38.57	20.44

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### PROJECTED ALASKA OIL AND NGL PRODUCTION

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(Million Barrels/Day)

Kuparuk         Point         Bluff         River         Lisburne N           0.264         0.054         0.004         0.002         0.064         0.009           0.260         0.062         0.005         0.006         0.058         0.011           0.252         0.058         0.007         0.006         0.057         0.011           0.236         0.052         0.008         0.005         0.057         0.010           0.218         0.052         0.008         0.004         0.049         0.009           0.199         0.039         0.010         0.004         0.045         0.008           0.190         0.035         0.012         0.003         0.041         0.008           0.180         0.035         0.012         0.003         0.041         0.008           0.149         0.028         0.012         0.003         0.035         0.007           0.149         0.028         0.011         0.002         0.035         0.006           0.149         0.028         0.010         0.002         0.036         0.006           0.123         0.024         0.010         0.002         0.036         0.006 <t< th=""></t<>
Kuparuk         Point         West         West         Apine         Tam         (2)         Badami           0.264         0.054         0.004         0.006         0.006         0.003         0.015         0.000         0.000         0.000         0.000           0.264         0.054         0.004         0.006         0.005         0.004         0.006         0.005         0.007         0.007         0.000
Kuparuk         Point         West         West         Aprilite         Alpine         Tam         (2)         R           0.264         0.054         0.004         0.002         0.032         0.154         0.001         0.000 </th
Kuparuk         Point         Veet         West         West           Cubaruk         Point         Bluff         River         Lisburne Niakuks         McIntyre         Beach         Sak         Alpine           0.264         0.054         0.006         0.056         0.007         0.006         0.056         0.001         0.000
Kuparuk         Point         Schrader         Sag         Endicott         (1)         Point         West           0.264         0.054         0.004         0.002         0.064         0.009         0.032         0.154         0.001           0.260         0.062         0.005         0.006         0.058         0.011         0.028         0.153         0.002           0.252         0.058         0.007         0.006         0.057         0.011         0.026         0.002           0.236         0.052         0.008         0.005         0.006         0.053         0.010         0.002           0.236         0.052         0.009         0.004         0.004         0.009         0.002         0.002           0.236         0.052         0.009         0.004         0.049         0.009         0.020         0.002           0.218         0.045         0.009         0.004         0.045         0.009         0.001         0.001           0.189         0.039         0.010         0.004         0.045         0.009         0.016         0.001           0.180         0.035         0.010         0.003         0.004         0.004         0.004
Kuparuk         Point         River         Lisburne Niakuks         McIntyre           0.264         0.054         0.004         0.002         0.064         0.009         0.052         0.154           0.264         0.056         0.005         0.006         0.058         0.011         0.028         0.154           0.252         0.058         0.007         0.006         0.057         0.011         0.026         0.099           0.252         0.058         0.007         0.006         0.057         0.011         0.026         0.099           0.236         0.052         0.008         0.006         0.057         0.011         0.026         0.099           0.248         0.005         0.006         0.053         0.010         0.004         0.049         0.009         0.020         0.067           0.199         0.039         0.010         0.004         0.049         0.009         0.018         0.057         0.018         0.057           0.180         0.035         0.012         0.003         0.041         0.004         0.046         0.046         0.046         0.046           0.149         0.028         0.012         0.012         0.012
Kuparuk         Point         Bluff         River         Lisburne N           0.264         0.054         0.004         0.002         0.064         0.009           0.260         0.062         0.005         0.006         0.058         0.011           0.252         0.058         0.007         0.006         0.057         0.011           0.236         0.052         0.008         0.005         0.010           0.218         0.045         0.009         0.004         0.049         0.009           0.199         0.039         0.010         0.004         0.045         0.008           0.180         0.035         0.012         0.003         0.041         0.008           0.180         0.035         0.012         0.003         0.041         0.008           0.149         0.028         0.012         0.003         0.041         0.008           0.149         0.028         0.012         0.003         0.004         0.006           0.134         0.026         0.010         0.002         0.035         0.006           0.133         0.024         0.010         0.002         0.036         0.006           0.135 <t< td=""></t<>
Kuparuk         Point         Bluff         River           0.264         0.054         0.004         0.002           0.260         0.062         0.005         0.006           0.252         0.058         0.007         0.006           0.236         0.052         0.008         0.005           0.218         0.045         0.009         0.004           0.199         0.035         0.010         0.004           0.180         0.035         0.012         0.003           0.149         0.028         0.012         0.002           0.134         0.026         0.011         0.002           0.133         0.024         0.010         0.002           0.133         0.024         0.010         0.002           0.134         0.026         0.011         0.002           0.133         0.024         0.010         0.002           0.113         0.022         0.009         0.001           0.057         0.017         0.009         0.001
Milne Sci 0.264 0.054 0.260 0.062 0.252 0.058 0.236 0.052 0.218 0.045 0.199 0.039 0.180 0.035 0.149 0.028 0.149 0.028 0.13 0.024 0.13 0.024 0.113 0.022
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<sup>(1)</sup> Includes Niakuk, West Niakuk (27), Niakuk 28, and Niakuk 29.

<sup>(2)</sup> Includes Prudhoe Bay and Kuparuk Satellite fields.

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### HISTORICAL OVERVIEW

### REVENUE, PRICES AND PRODUCTION

The pages that follow contain historical revenue, price and production data. Table 20 on Pages 40-41 shows General Fund unrestricted revenue by type from FY 1983-1997.

Table 21 on Page 42 shows historical petroleum revenue by type from FY 1965-1997.

Finally, this section concludes with Tables 22 and 23 on Page 43 with historical crude oil prices (FY1981-1997) and production for the North Slope and Cook Inlet (FY 1978-1997).

## HISTORICAL GENERAL FUND UNRESTRICTED REVENUE (\$ Million)

**TAX PORTION** 

						₹	7 2 5	ZI							
TAXES	FY 83	F784	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	(1) FY 96	(1) FY 97
Property Tax Sales/Use	152.6	131.0	128.4	113.5	102.5	96.2	89.7	89.8	85.0	0.69	6.99	61.5	57.3	56.0	53.6
Alcoholic Beverages	10.4	13.0	13.9	13.3	12.6	12.1	11.8	12.0	12.2	12.0	11 0	12.0	100	6	4
Tobacco Products	2.0	2.0	2.0	4.9	9.9	6.1	6.4	1.0	14.0	14.0		7 7	14.0	0.7	0 5
Insurance Premium	13.8	16.2	17.5	21.1	23.7	23.7	19.4	7 66	2.7.2	- C	0.4.0	<u>+</u> 6	4, 6	7.4.0	13.7
Motor Fuel Tax-Aviation	8.7	8.1	8.0	8	85	0 6	10.	0 4	10.7	40.0	20.5	- 0	B. 12	7.87	28.4
Motor Fuel Tax-Highway	23.7	20.2	23.7	22.7	18.3	19.3	20.0	20.0	. 6	79.7	9.0 9.4	9. u	O. 8	Z 6	× × ×
Motor Fuel Tax-Marine	4.3	3.9	4.3	5.3	5.4	5.3	7.2	9.2	10.0	9.4	0.00	2.0.2	24.0	0.12	7.3
lotal Income Tax	62.9	63.4	69.4	75.4	75.1	75.5	74.9	87.2	90.4	95.1	93	92.7	93.9	92.1	89.0
Corporation General	30.3	39.5	36.0	11.2	20.5	23.4	38.0	45.3	37.9	33.7	25.1	0 7 7	010	2	•
Corporation Petroleum	236.0	265.1	168.6	133.9	120.4	158.0	166.0	117.0	185.1	165.r	117 B	5 6	0.70	00.0	40.4
Total	266.3	304.6	204.6	145.1	140.9	1814	2040	162 5	223.0	100.0	143.7	62.4	128.5	7.3.7	269.4
Severance Tax						- - - -		2	0.034	7.66	147.1	07.1	90.0	0.722	317.8
	1493.0	1392.4	1388.7	1107.4	647.3	816.4	696.4	972.3		1022.2	989 4	662 g	769.8	7747	0.400
Oil and Gas Conservation	0.7	0.7	0.7	0.5	1.2	2.3	2.4	2.4		23	2.1	2.3	0.60	- α	0.706
l Gas Hazard Release	0.0		0.0	0.0	0.0	0.0	0.0	26.9	28.0	28.7	26.1	27.0	22.1	13.7	12.9
Other Natural Resource Tax	1493.7	1393.1	1389.4	1107.9	648.5	818.7	698.8	1001.6	1284.1	1053.2	1017.6	692.1	793.9	787.2	921.6
Salmon and Seafood Marketing 0.9	ting 0.9	7:	1.0	<del>-</del>	4.	2.7	ю С	60	6. 6.	α α	<b>u</b>	ď	1	0	1
Salmon Enhancement	2.6	2.2	2.6	43	4 4	rc ec	ם י	, A	) (	) (	9 0	) i	. r	0 r	0.7
Fisheries Business	20.5	19.0	18.7	21.1	26.5	22.5	26.7	25.1	3.15	3.4.6	0.0	0.0	30.0	7.0	2.4.2
Fish Landing	0.0	0.0	0.0	0.0	0.0	0.0	00				7.7		08.0 4.0	20.7	3 - O
Total	24.0	22.3	22.3	26.5	32.3	31.0	39.5	34.9	40.6	37.1	52.6	44.8	50 Q	50.1	50 1
Other lax												?	9	3	- S
Estate	0.7	0.7	0.5	0.7	1.1	0.3	0.7	<del>1.</del>	3.3	1.0	0.9	9.	1.2	1.7	17
Officer 1	8	21.9	40.9	4.3	3.8	3.8	4.2	4.7	4.1	4.1	4	47	4	4.0	. ער כי
lotal	9.5	22.6	41.4	2.0	4.9	4.	4.9	5.8	7.4	5.1	5.0	6.3	0.0	9.9	6.7
TOTAL TAXES	2008.7	2008.7 1937.0 1855	1855.5	1473.4	1004.2	1206.9	1111.8	1381.8	1730.5	1458.7	1377.8	959.5	1206.5 1228.0		1438.8

<sup>(1)</sup> Starting in FY 1996, all program receipts are included in General Fund unrestricted revenue. FY 1996 also includes payment from the TAPS Liability Fund.

### NON-TAX PORTION

9 2 3

	FY 83	₹ <b>28</b>	FY 85	FY 86	FY 87	₹	FY 89	FY 90	FY 94	FY 92	FY 93	₹ \$	FY 95	₹ 38	(1) FY 97
Licenses and Permits	25.7	26.7	28.9	29.3	29.2	28.3	28.3	27.8	29.1	32.4	32.7	35.7	34.7	609	69.0
<u>Intergovernmental Receipts</u> Federal Shared Revenues	33.3	14.0	10.5	5.7	9.7	6.9	6.1	10.0	14.8	ीत 11.4	10.3	4.3	4.2	1.0	2.0
Charges for Services Marine Highways	30.4	32	33.4	323		o c	ç	č	,		:	;			
Other	17.0	14.7	19.2	15.9	15.7	10.0	10.5	12.2	40.7 16.5	42.3	40.8	40.4	41.5	38.5	38.6
Total	47.4	46.7	52.6	48.2	47.0	39.8	43.6	46.2	57.2	86.4	55.1	58.4	18.1 59.6	36.9 75.4	39.5 78.1
Fines and Forefeitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	8.2
Rents and Royalties Mineral Bonuses, Rents.															
Royalties	40.5	16.1	16.6	40.9	6.5	11.6	16.7	5.3	24.8	6.5	44 3	5.2	ת	ď	1
Oil and Gas Royalties	1078.4	1047.5	1034.0	830.7	439.3	694.8	602.9	747.4	951.6	702.4	711.3	512.1	628.3	6.0.3	7.7
Timber Sales	4.0	2.9	3.1	2.9	7.2	<del>1</del> .	0.5	0.8	0.4	9.0	90	0.4	90.0	7.7.2	7.90.7
Sale of State Property	6.3	7.0	8.5	8.7	7.0	3.8	4.9	4.3	4.7	0,	0.4	r 0	2.00	- «	ກ ແ ~ α
Total	1129.2	1073.5	1062.2	883.2	460	711.3	628	757.8	981.5	710.5	760.2	526.7	656.3	658.7	1.777
Investment Earnings	375.8	282.7	233.5	195.2	161.9	132.6	100.7	117.9	125.0	101.8	70.9	31.7	72.4	64.1	1.77
Miscellaneous Revenue	10.9	9.5	16.8	13.0	16.9	16.1	10.0	10.9	14.9	61.4	45.0	36.2	49.2	35.8	44.6
Sub-Total NON-TAX REVENUE	1622.3	1453.1	1404.5	1183.4	724.7	935.0	816.7	9706	1000	4002	2	6		1	
Plus: Income from prior years	0.0	0.0	0.0	418.7	70.5	163.9	257.7	154.8	33.6	6.500	2.4.6	0.560	4/6/6	905.3	1056.1
TOTAL NON-TAX REVENUE	1622.3	1453.1	1404.5	1602.1	795.2	1098.9	1074.4	1125.4	1256.1	1003.9	974.2	693.0	876.4	905.3	1056.1
TOTAL TAX REVENUE	2008.7	1937.0	1855.5	1473.4	1004.2	1206.9	1111.8	1381.8	1730.5	1458.7	1377.8	959.5	1206.5	1228.0	1438.8
TOTAL GENERAL FUND UNRESTRICTED REVENUE	3631.0	3390.1	3260.0	3075.5	1799.4	2305.8	2186.2	2507.2	2986.6	2462.6	2352.0	1652.5	2082.9	2133.3	2494.9

(1) Starting in FY 1996, all program receipts are included in General Fund unrestricted revenue. FY 1996 also includes payment from the TAPS Liability Fund.

HISTORICAL PETROLEUM REVENUE

Table 21.

(\$ Million)

							(3)			
			Petroleum			(1)(2)	Petroleum	Total	Total GF	Petroleum
	Corporation	Severance	Property	Reserve	(1)(2)	Bonuses	Special	Petroleum	Unrestricted	Revenue to
_	Petroleum Tax	¥	超	Tax	Royalties	and Rents	Settlements	Revenue	Revenue	Unrestricted GF
1965		0.3	•	,	8.4	7.8		16.5	830	7ους
1966	•	0.3			8.0	13.3	•		0000	20 /0
1967	•	0.5			9.6	<u>†</u>	•	21.5	90.3 80.0	23% 2 <b>5</b> %
1968	0.1	102			17.0	24.7		52.0	112.7	46%
1969	0.1	9.6			24.7	4.1		34.5	112.4	31%
1970	0.4	7.9			27.5	903.1		938.9	1067.3	%88
1971	6.0	10.5	•		32.5	3.1		47.0	220.4	21%
1972	1.2	11.4	•		32.5	3.3		48.4	219.2	22%
1973	6.0	12.0			30.2	7.2		50.3	208.2	24%
1974	12	14.8			35.8	28.4		80.2	254.9	31%
1975	2.5	26.6	9.9		49.8	4.9		90.4	333.4	27%
976	4.9	28.0	83.4	223.1	48.4	3.7		391.5	709.8	55%
1277	5.0	23.8	139.1	270.6	36.3	2.8		477.6	874.3	55%
978	8.4	107.7	173.0		150.6	1.8	6	441.5	764.9	58%
979	232.6	173.8	163.4		250.2	1.6		821.6	1133.0	73%
086	547.5	506.5	168.9		689.4	344.2	0.00000	2256.5	2501.2	%06 806
<del>8</del>	860.1	1170.2	143.0		1119.7	11.3		3304.3	3718.0	%68
1982	6.899	1581.7	142.7		1174.4	7.1		3574.8	4108.4	%28
83	236.0	1493.7	152.6		1105.6	38.7		3026.6	3631.0	83%
984	265.1	1393.1	131.0		1058.5	13.9		2861.6	3390.1	84%
882	168.6	1389.4	128.4		1042.2	14.9		2743.5	3260.0	<b>84</b> %
986	133.9	1107.9	113.5		845.0	38.9	418.2	2657.4	3075.5	%98
284	120.4	648.5	102.5		448.3	4.3	70.5	1394.5	1799.4	77%
886	158.0	818.7	36.2		701.5	11.3	163.9	1949.6	2305.8	85%
686	166.0	698.8	89.7		611.5	16.7	257.7	1840.4	2186.2	84%
<u>6</u>	117.2	1001.6	86.8	0.0	753.7	4.2	154.8	2121.3	2507.2	85%
994	185.1	1284.8	85.0	0.0	958.7	24.7	33.5	2571.8	2986.6	%98
992	165.5	1053.2	0.69	0.0	708.2	8.9	4.7	2007.4	2462.6	82%
993	117.6	1017.6	6.99	0.0	716.7	44.3	4.7	1967.8	2352.0	%4%
<del>3</del> 8	17.8	692.1	61.5	0.0	516.1	5.1	0.1	1292.7	1652.5	%8%
995	128.5	793.9	57.3	0.0	631.8	2.0	0.7	1617.2	2082.9	%82
966	173.7	787.2	26.0	0.0	642.2	2.7	0.0	1664.8	2133.3	%82
264	269.4	921.6	53.6	0.0	759.2	6.4	0:0	2010.2	2949.9	81%

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<sup>(1)</sup> These categories are primarily composed of petroleum revenue; however, they include some additional revenue from other minerals (mostly coal).

<sup>(2)</sup> Since FY 1997, royalties and bonues and rents are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

<sup>(3)</sup> Not subject to CBRF deposits.

 Table 22.
 HISTORICAL CRUDE OIL PRICES

(\$/ Barrel)

32.52 30.59 28.15 16.14 18.53 16.93 20.06 24.95 20.69 20.69 16.69 18.46 23.11 19.20 WTI Spot **ANS Average** Reported Sales 28.04 26.77 26.27 21.52 13.43 16.15 14.36 17.01 20.93 16.33 17.58 13.99 16.39 Gulf Coast Spot 27.89 30.31 29.23 22.03 15.05 16.97 15.21 17.66 18.53 15.03 22.21 17.81 ANS West Coast 16.12 17.22 21.57 14.61 16.64 17.83 14.05 16.77 20.90 Spot 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 ፫

Source: <u>Platt's Oilgram Price Report.</u> Alaska Department of Revenue, Oil and Gas Audit Division.

Table 23. HISTORICAL CRUDE OIL PRODUCTION (Million Barrels/Day)

" C. J. "

Ł	ANS	Cook Inlet	TOTAL
1978	0.702	0.144	0.846
1979	1.197	0.131	1.328
1980	1.422	0.109	1.531
1981	1.511	0.093	1.604
1982	1.570	0.080	1.650
1983	1.627	0.073	1.700
1984	1.657	0.065	1.722
1985	1.694	0.055	1.749
1986	1.802	0.045	1.847
1987	1.849	0.047	1.896
1988	2.005	0.043	2.048
1989	1.960	0.043	2.003
1990	1.853	0.033	1.886
1991	1.799	0.040	1.839
1992	1.791	0.042	1.833
1993	1.687	0.041	1.728
1994	1.601	0.038	1.639
1995	1.573	0.042	1.615
1996	1.474	0.042	1.516
1997	1.404	0.037	1.441

Source: Alaska Department of Revenue, Oil and Gas Audit.

In accordance with AS 37.07.060(b)(4), the Revenue Sources Book is compiled biannually by the Department of Revenue to assist the Governor in formulating a proposed comprehensive financial plan for presentation to the state Legislature. Within the publication are shown prior year actuals, revised current year estimates, and future year projections.

Anticipated state income is projected through the use of a number of data sources: (1) econometric models developed by the Department of Revenue to forecast unrestricted non-petroleum revenues; (2) a petroleum revenue model created by the Department's Oil and Gas Audit Division; and (3) estimates from individual state agencies.

We thank the various state agencies for their cooperation in computing anticipated revenues for publication in this document.

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